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AGILENT TECHNOLOGIES, INC.  
Legal Department, DL429  
Intellectual Property Administration  
P. O. Box 7599  
Loveland, Colorado 80537-0599

12-19-03

Image

PATENT APPLICATION

ATTORNEY DOCKET NO. 10010381-1

IN THE  
UNITED STATES PATENT AND TRADEMARK OFFICE

Inv 'ntor(s): Lefkowitz

Serial No.: 09/944,083

Filing Date: 08-31-2001

Examiner: My Chau T. Tran

Group Art Unit: 1639

Title: Methods for Generating Ligand Arrays Via Deposition of Ligands onto Olefin Displaying Substrates, and Arrays Produced Thereby

COMMISSIONER FOR PATENTS  
PO Box 1450  
Alexandria, VA 22313-1450

TRANSMITTAL LETTER FOR RESPONSE/AMENDMENT

Sir:

Transmitted herewith is/are the following in the above-identified application:

- (X) Response/Amendment ( ) Petition to extend time to respond  
(X) New fee as calculated below ( ) Supplemental Declaration  
( ) No additional fee (Address envelope to "Mail stop Non-Fee Amendments")  
(X) Other: Petition Under 1.78(a)(3), Declaration, postcard (fee \$ 1,330.00 )

| CLAIMS AS AMENDED BY OTHER THAN A SMALL ENTITY       |  |                        |  |                         |             |                           |
|--|--|------------------------|--|-------------------------|-------------|---------------------------|
| (1)<br>FOR   | (2)<br>CLAIMS REMAINING<br>AFTER AMENDMENT | (3)<br>NUMBER<br>EXTRA | (4)<br>HIGHEST NUMBER<br>PREVIOUSLY PAID FOR | (5)<br>PRESENT<br>EXTRA | (6)<br>RATE | (7)<br>ADDITIONAL<br>FEES |
| TOTAL<br>CLAIMS                                      |  | MINUS                  |  | = 0                     | X \$18      | \$ 0                      |
| INDEP.<br>CLAIMS                                     |  | MINUS                  |  | = 0                     | X \$86      | \$ 0                      |
| [ ] FIRST PRESENTATION OF A MULTIPLE DEPENDENT CLAIM |  |                        |  |                         | + \$290     | \$ 0                      |
| EXTENSION<br>FEE                                     | 1ST MONTH<br>\$110.00                      | 2ND MONTH<br>\$420.00  | 3RD MONTH<br>\$950.00                        | 4TH MONTH<br>\$1480.00  |             | \$ 0                      |
| OTHER FEES   |  |                        |  |                         |             | \$ 1,330                  |
| TOTAL ADDITIONAL FEE FOR THIS AMENDMENT              |  |                        |  |                         |             | \$ 1,330                  |

Charge \$ 1,330 to Deposit Account 50-1078. At any time during the pendency of this application, please charge any fees required or credit any overpayment to Deposit Account 50-1078 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 50-1078 under 37 CFR 1.16, 1.17, 1.19, 1.20 and 1.21. A duplicate copy of this sheet is enclosed.

"Express Mail" label no. EV333998287US

Date of Deposit 12-17-2003

I hereby certify that this is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to: Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450.

By

Typed Name: Donna Macedo

Respectfully submitted,

Lefkowitz

By

Bret Field for Gordon Stewart

Attorney/Agent for Applicant(s)

Reg. No. 37,620

Date: 12-17-2003



|  |                        |  |
|--|------------------------|--|
| <b>Petition Under<br/>37 C.F.R. § 1.78(a)(3)</b> | Application Number     | 09/944,083   |
|  | Attorney Docket Number | 10010381-1   |
|  | Filing Date            | August 31, 2001  |
|  | First Named Inventor   | Lefkowitz  |
|  | Examiner               | My Chau T Tran   |
|  | Group Art              | 1639   |
|  | Confirmation number    | 1180   |
|  | Title                  | Methods for Generating<br>Ligand Arrays Via<br>Deposition of Ligands<br>onto Olefin Displaying<br>Substrates, and Arrays<br>Produced Thereby |

Sir:

Applicants hereby petition to amend the specification to make a claim to priority to the filing date of U.S. Patent Application serial no. 09/145,015, pursuant to 37 C.F.R. § 1.78(a)(3). The entire delay between the date that the claim was due under paragraph 37 C.F.R. § 1.78(a)(2)(ii) and the present request was unintentional. Enclosed with this response is the requisite: (1) processing fee pursuant to 37 C.F.R. § 1.17(t).

Respectfully submitted,

Date: December 17, 2003

By: 

Bret Field  
Registration No. 37,620

encs:

- Fee pursuant to 37 C.F.R. § 1.17(t)

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|                                    |                        |   |
|------------------------------------|------------------------|---|
| <b>RESPONSE TO ADVISORY ACTION</b> | Application Number     | 09/944,083  |
|                                    | Attorney Docket Number | 10010381-1  |
|                                    | Filing Date            | August 31, 2001   |
|                                    | First Named Inventor   | Lefkowitz   |
|                                    | Examiner               | My Chau T Tran  |
|                                    | Group Art              | 1639  |
|                                    | Confirmation number    | 1180  |
|                                    | Title                  | Methods for Generating Ligand Arrays Via Deposition of Ligands onto Olefin Displaying Substrates, and Arrays Produced Thereby |

Sir:

In response to the Advisory Action dated November 21, 2003 and further to the response filed on October 31, 2003, the following additional comments and materials are provided:

### **REMARKS**

#### **Amendment to the Inventorship**

In the Advisory Action, the Examiner states that the amendment to the inventorship was not entered because a new oath signed by all of the inventors was not included with the response. Enclosed with this response are declarations filed by all of the inventors. Accordingly, entry of the amendment to inventorship is respectfully requested as all of the necessary documents for such have been submitted to the Patent Office.

#### **Amendment to the Specification**

The Examiner did not amend the specification regarding the claim for priority for the asserted reason that a separate petition did not accompany the response. It is respectfully submitted that the previously filed request also served as the the Applicants' petition. Nonetheless, enclosed with this response is the requested separate petition. As a separate petition has now been filed along with the requisite fee, amendment to the specification as previously requested to claim to priority to the

filing date of U.S. Patent Application serial no. 09/145,015, pursuant to 37 C.F.R. § 1.78(a)(3) is now proper.

### **Amendment to the Claims**

As previously explained, all of the claims have been amended to specify that the olefin displaying surface of the substrate is produced by contacting the surface with an olefin-silane derivatizing composition, support for this amendment being found in the specification in paragraphs 40 to 46, among other locations. New claims 50 and 51 find support in the specification specifically at page 19, paragraph 71. Accordingly, contrary to the assertion raised in the Advisory action, new claims 50 and 51 do not raise issues of new matter.

### **Rejection of Claims under 35 U.S.C. § 103**

Claims 7-14, 16-23, 25-26 and 44-49 remain rejected under 35 U.S.C. § 103(a) as being obvious over Sundberg in view of Wang, for the asserted reason that the combined teachings of these references teach a method of producing a ligand array by attaching ligands to a functionalized surface, which combined teaching assertedly renders the claimed invention obvious.

However, a feature of the pending claims is that the substrate which is contacted with the ligands in the claimed methods is one that is provided by **"contacting said surface with a derivatizing composition comprising at least a first silane having an olefin functional group..."** As such, the claimed methods are limited in that the surface of the substrate employed in the claimed methods must be produced by contacting the substrate surface with a derivatizing composition that includes a silanating agent having an olefinic functional group, i.e., a functional groups that includes a carbon-carbon double bond.

Both Sundberg and Wang describe functionalized surfaces in general, but fail to teach or suggest such a surface-derivatizing step, as required in the claims.

As such, the combined teaching of Sundberg and Wang fails to teach or suggest the claimed methods. Accordingly, Claims 7-14, 16-23, 25-26 and 44-47 are not obvious under 35 U.S.C. § 103(a) over Sundberg in view of Wang and this rejection may be withdrawn.

Next, Claims 7, 15-16 and 24 are rejected under 35 U.S.C. § 103(a) as being obvious over Sundberg in view of Wang, and further in view of Gleason.

As explained above, a feature of the pending claims is that the substrate which is contacted with the ligands in the claimed methods is one that that is provided by "**contacting said surface with a derivatizing composition comprising at least a first silane having an olefin functional group...**" As such, the claimed methods are limited in that the surface of the substrate employed in the claimed methods must be produced by contacting the substrate surface with a derivatizing composition that includes a silanating agent having an olefinic functional group, i.e., a functional groups that includes a carbon-carbon double bond.

Both Sundberg and Wang describe functionalized surfaces in general, but fail to teach or suggest such a surface-derivatizing step, as required in the claims. Gleason also fails to teach or suggest such a surface derivatizing step, as required in the claims, as required in the claims.

As such, the combined teaching of Sundberg and Wang in view of Gleason fails to teach or suggest the claimed methods. Accordingly, Claims 15-16 and 24 are not obvious under 35 U.S.C. § 103(a) over Sundberg in view of Wang and further in view of Gleason and this rejection may be withdrawn.

**CONCLUSION**

The applicant respectfully submits that all of the claims are in condition for allowance, which action is requested. If the Examiner finds that a telephone conference would expedite the prosecution of this application, please telephone Gordon Stewart at 650 485 2386. The Commissioner is hereby authorized to charge any fees under 37 C.F.R. §§ 1.16 and 1.17 which may be required by this paper, or to credit any overpayment, to Deposit Account No. 50-1078.

Respectfully submitted,

Date: December 17, 2003

By:   
Bret Field  
Registration No. 37,620

encs:

- Petition under 37 C.F.R. § 1.78(a)(3) and fee pursuant to 37 C.F.R. § 1.17(t)
- Declaration by Inventors

DATE: December 17, 2003



EV333998287US

THE EXPRESS MAIL NUMBER OF THE DAY IS: EV333998287US

The person taking the Express Mail to the Post Office is: Alicia Silvestrini

**EXPRESS MAIL CERTIFICATION**

Date of Deposit: 12/17/2003 I hereby certify that the below-listed papers or fees were inserted into a package addressed to: Commissioner for Patents, PO BOX 1450, Alexandria, Virginia 22313-1450 and was deposited by me with the United States Postal Service "Express Mail Post Office Addressee" service under 37 C.F.R. § 1.10 on the date indicated above.

Signature

*A. Silvestrini*

Date

12/17/03

| Atty. Docket No. | Serial Number | Description   | Atty. | Fee     |
|------------------|---------------|---|-------|---------|
| RIGL-004CON2     | 09/916,940    | Interview Summary   | PJS   |         |
| STAN-258US1      | 10/367,405    | Transmittal, IDS, SB08A, Copy of International Search Report dated 11/26/03, Copies of (2) Cited References                           | PJS   |         |
| AGIL-016         | 09/944,083    | Transmittal <i>in duplicate</i> , Response to Advisory Action, Petition under 1.78(a)(3), Executed Declaration <i>in counterparts</i> | BEF   | \$1,330 |
| AERX-076CIP      | 10/649,376    | Transmittal, Fee Transmittal <i>in duplicate</i> , ADS, Copy of Notice to File Missing Parts, Executed Declaration                    | KYB   | \$1,180 |
| STAN-166         | 09/716,054    | Notice of Appeal <i>in duplicate</i> (Petition for a 3 mos. ext. of Time)   | BEF   | \$1,170 |
| UCAL-230CIP      | 10/265,071    | IDS, SB08A, Copies of 2 Cited References  | PAB   |         |
| STAN-258CIP      | 10/716,846    | Transmittal, IDS, SB08A, Copy of International Search Report dated 11/26/2003   | PJS   |         |
| UCAL-230         | 10/025,966    | Transmittal, IDS, SB08A, Copies of (2) Cited References   | PAB   |         |
| BERK-020         | 10/145,648    | PTOL-85B <i>in duplicate</i>  | PAB   | \$965   |